

Remarks

Applicant presents claims 6 to 16 and 18 for consideration. Applicant has previously cancelled claims 1 to 5, 17, 19 and 20 without prejudice, and reserves the right to subsequently file a continuation application utilizing the presently rejected claims.

Applicant has not modified any of claims 6 to 16 in view of the Examiner's indication that they are allowable.

In light of telephone conversations with the Examiner, Applicant has amended claim 18 and respectfully submits that claim 18, as amended, is now allowable.

35 USC § 103 Rejections

The Examiner rejected claim 18, as previously presented, pursuant to 35 USC § 103, in view of Takahashi (US 6192435 B1) in combination with Wood (US 5726506). Applicant respectfully traverses the Examiner's obviousness rejection against claim 18 as presently amended, and submits that claim 18 as presently amended is non-obvious over Takahashi in combination with Wood.

For convenience, claim 18 as presently amended follows (additions underlined):

A multiconductor plug and socket means arrangement, said plug and socket means sharing a common axis, said plug means having a plurality of plug contacts thereon, adapted for insertion in said socket means, said socket means having a plurality of socket contacts disposed thereon corresponding to said plug contacts, comprising:

- a) a first plug contact of said plug contacts electrically coupled to a first diode, and at least one other plug contact electrically coupled to plug isolation means;
- b) a first socket contact of said socket contacts electronically coupled to a second diode, and at least one other socket contact electronically coupled to socket isolation means;

- c) the plug isolation means activated only when the second diode is detected by the full engagement of the plug and socket so as to then permit electrical current to flow to and/or from said at least one other plug contact thereon; and
- d) the socket isolation means activated only when the first diode is detected by the full engagement of the plug and socket so as to then permit electrical current to flow to and/or from said at least one other socket contact thereon;

wherein the at least one other plug contact is electrically coupled to the plug isolation means regardless of whether the plug and socket means are engaged or disengaged; and

wherein the at least one other socket contact is electronically coupled to the socket isolation means regardless of whether the plug and socket means are engaged or disengaged.

As the Examiner has acknowledged in the Final Office Action, Takahashi shows a plug and socket arrangement comprising a main unit 20 (the socket side) and a peripheral unit 30 (the plug side) (see, e.g., Figure 2 of Takahashi, which is the Figure on which the Examiner has focused). Also as acknowledged by the Examiner, Figure 2 of Takahashi discloses two electronic isolation means: switch SW1 and transistor 10.

Notably, however, the switch SW1 and transistor 10 of Takahashi are both coupled to the plug side of Takahashi such that when the plug and socket sides of Takahashi are disengaged, or uncoupled, the socket side circuitry of Takahashi is not electrically coupled to either of the isolation means, switch SW1 or transistor 10. *Electrical coupling of the socket side circuitry of Takahashi to the isolation means, switch SW1 and transistor 10, occurs only when the plug and socket sides of Takahashi are engaged (i.e.: when the plug side is inserted into the socket side).*

In contrast, claim 18 as presently amended claims a plug and socket means arrangement comprising at least one other plug contact, at least one other socket contact, plug isolation means, and socket isolation means, wherein the at least one other plug contact is electrically coupled to the plug isolation means *regardless of whether the plug and socket means are engaged or disengaged*, and wherein the at least one other socket contact is electronically coupled to the socket isolation means *regardless of whether the plug and socket means are engaged or disengaged*.

Referring now to Figures 1 and 3 of Applicant's application, Applicant highlights the socket side isolation circuit 216 that is always coupled to the socket 226, *even when the plug 212 is not inserted into the socket 226*. In the exemplary embodiment of Figure 3, the socket side isolation circuit 216 has socket isolation means in the form of digital switches 245, which are coupled to digital lines 231, 232 that form part of the I/O lines 222 that are coupled to the socket 226. Again, *the socket isolation means are coupled to the socket 226 even when the plug 212 is not inserted into the socket 226 (i.e.: the plug 212 and socket 226 are disengaged)*.

Additionally, referring now to Figures 1 and 2 of Applicant's application, Applicant highlights the plug side isolation circuit 202 that is always coupled to the plug 212, *even when the plug 212 is not inserted into the socket 226*. In the exemplary embodiment of Figure 2, the plug side isolation circuit 202 has plug isolation means in the form of digital switches 246, which are coupled to digital lines 233, 234 that form part of the I/O lines 208 that are coupled to the plug 212. Again, *the plug isolation means are coupled to the plug 212 even when the plug 212 is not inserted into the socket 226 (i.e.: the plug 212 and socket 226 are disengaged)*.

In contrast, Takahashi only discloses the presence of Isolation means switch SW1 and transistor 10 on the plug side (i.e.: peripheral unit 30), which isolation

means are not coupled to the socket side (i.e.: main unit 20) when the plug and socket side are disengaged.

Furthermore, Wood does not disclose, nor has the Examiner alleged that Wood discloses, the presence of any isolation means akin to the plug and socket isolation means claimed in claim 18, as presently amended.

As there is no teaching in Takahashi that either of the isolation means should be located on the socket side such that the socket side will be coupled to isolation means even when the plug and socket are disengaged, and as there is no disclosure in Wood of isolation means akin to Applicant's claimed plug and socket isolation means, Applicant respectfully submits that the combination of Takahashi and Wood does not result in the invention claimed in claim 18 as presently amended.

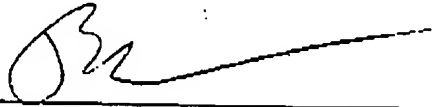
Additionally, Applicant notes that in the Advisory Action, the Examiner said:

Applicant argues "such that when the plug and socket sides of Takahashi are disengaged ..." albeit true, these limitations were examined wherein the invention of Takahashi was engaged. The Examiner fails to see any claim limitations preventing this interpretation.

Applicant respectfully submits that claim 18, as presently amended, now clearly contains the limitation that the at least one other plug contact is electrically coupled to the plug isolation means regardless of whether the plug and socket means are engaged or disengaged; and that the at least one other socket contact is electronically coupled to the socket isolation means regardless of whether the plug and socket means are engaged or disengaged. Regardless of whether the apparatus taught by Takahashi is considered in its engaged or disengaged states, Takahashi does not teach an apparatus wherein socket contacts are electronically coupled to isolation means when the apparatus is in a disengaged state.

In view of the above, Applicant submits that this application is now in condition for allowance, and a Notice thereof is respectfully requested.

Respectfully submitted,



Brian Y. Lee
Registration no. 47,329
Gowling Lafleur Henderson LLP
2300 - 1055 Dunsmuir Street
Vancouver, BC V7X 1J1
Canada
Phone: 604-443-7682